

Amendments to the Specification:

Page 8, please amend the second full paragraph (lines 6-7) as follows:

FIG. 6 is an isometric, partial enlargement view of the preferred embodiment of FIG. 5, showing the adjusting bar driven in guiding rails; [[and]]

Page 8, at line 10, insert the following new paragraphs:

FIG. 8 shows an embodiment of the invention in which the adjusting bars are in the form of screws that can be driven through an internal thread formed in the retaining means; and

FIG. 9. shows an embodiment of the invention in which the shimming plugs or adjusting bars are driven by electric motors under the control of a computer.

Page 8, amend the paragraph after the subheading “Embodiments”, as follows:

FIGs. [[1,]] 3 and 4A illustrate a magnetic field adjusting device of the present embodiment, and its application to a known magnet arrangement, such as is shown in FIG. 1.

Page 9, amend the first full paragraph as follows:

FIG. 3 illustrates, as an example, the lower magnetic field generating source 51 on the lower press plate 21, lower pole plate 31 and the ring-shaped part 40 at the periphery thereof. Said ring-shaped part 40 comprises a plurality, for example twelve, of sector segments 41 which connect with each other to form ring-shaped part 40. Each of the segments 41 incorporates a retaining groove 45 (FIG. 4A) along the radial direction of the ring-shaped part 40. A shimming plug 42 is placed within each retaining groove, so as to be moveably retained within the retaining groove. In this embodiment there are twelve retaining grooves 45 and twelve shimming plugs 42, distributed evenly about the ring-shaped part 40. Of course, the number of retaining grooves 45 and shimming plugs 42 can be varied according to requirement, and can also be distributed asymmetrically. In an embodiment such as illustrated in Fig. 1, similar modifications may be made to the upper magnetic field generating source 5.

Page 11, amend the second full paragraph as follows:

FIGs. [[1,]] 5 and 6 illustrate another embodiment of the present invention.

Please amend the paragraph bridging pages 12 and 13 as follows:

In accordance with another embodiment of the present invention (~~not shown~~) illustrated schematically in FIG. 8, the magnetic field adjusting device of the present invention has the similar structure to the embodiment illustrated in FIGs. 1, 5 and 6, except in that the adjusting bars 71, 81 are in the form of screws, which can be driven in an internal thread 71a, 81a formed in the press plate 21 or pole plate 31, which serve as retaining means. The screws are thereby mounted and retained on the base in an appropriate manner.

Please amend the first full paragraph on page 14 as follows:

The drive means may be arranged to be driven manually, or may be remotely driven by appropriately controlled electric motors. In a particularly advantageous embodiment, such electric motors may be controlled by a computer operating a magnetic field measuring and modeling software to automatically shim the magnet for optimum homogeneity. Thus, in the embodiment illustrated schematically in FIG. 9, for example, the shimming plugs or adjusting bars 42, 71 or 81 may be adjusted by one or more electric motors 91, which in turn may be controlled by a computer 92 that is programmed with magnetic field measurement and/or modeling software 92A. The computer thus controls the electric motors 91 to adjust the shimming plugs or adjusting bars 42, 71 or 81

automatically in response to measured or modeled magnetic field data, to achieve a desired level of field homogeneity. That is, the shimming plugs or adjusting bars may be adjusted in a synchronized manner.